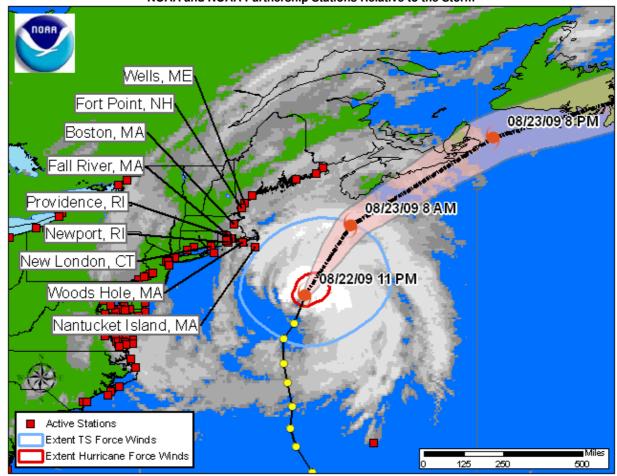


NOAA and NOAA Partnership Stations Relative to the Storm



Storm Analysis

As of 8/23/2009 00:00 AST, water levels along the New England coast from Connecticut to Maine remain at or near predictions. Barometric Pressure continues to fall across the region.

Water Level and Meteorological plots available below are updated automatically. Water level predictions relative to <u>Mean Lower Low Water</u> are:

Nantucket Island, MA: Next predicted high tide is 3.7 ft (1.14 m) at 08/23/2009 02:48 EDT.

Woods Hole, MA: Next predicted high tide is 2.7 ft (0.83 m) at 08/23/2009 10:54 EDT.

Fall River, MA: Next predicted high tide is 5.8 ft (1.78 m) at 08/23/2009 11:00 EDT.

Hurricane BILL QuickLook, POSTED 00:00 AST 08/23/2009

Providence, RI: Next predicted high tide is 6.0 ft (1.83 m) at 08/23/2009 11:00 EDT.

Newport, RI: Next predicted high tide is 4.5 ft (1.38 m) at 08/23/2009 10:42 EDT.

New London, CT: Next predicted high tide is 3.5 ft (1.06 m) at 08/23/2009 12:06 EDT.

Boston, MA: Next predicted high tide is 11.3 ft (3.45 m) at 08/23/2009 01:42 EDT.

Fort Point, NH: Next predicted high tide is 10.5 ft (3.21 m) at 08/23/2009 01:42 EDT.

Wells, ME: Next predicted high tide is 10.7 ft (3.25 m) at 08/23/2009 01:42 EDT.

For additional data, please see the <u>Center for Operational Oceanographic Products & Services</u> website. For more information or archived products and reports, please see the <u>Storm QuickLook</u> Homepage.

Analyst: CF

SELECT NATIONAL HURRICANE CENTER ADVISORY INFORMATION:

HURRICANE BILL ADVISORY NUMBER 31

1100 PM AST SAT AUG 22 2009

...BILL TURNING TOWARD THE NORTH-NORTHEAST...OUTER RAINBANDS APPROACHING CAPE COD AND NANTUCKET...

A TROPICAL STORM WARNING REMAINS IN EFFECT FOR THE COAST OF MASSACHUSETTS FROM WOODS HOLE TO SAGAMORE BEACH, INCLUDING THE ISLANDS OF MARTHAS VINEYARD AND NANTUCKET.

INTERESTS ELSEWHERE ALONG THE COAST OF NEW ENGLAND SHOULD MONITOR THE PROGRESS OF BILL.

AT 1100 PM AST THE CENTER OF HURRICANE BILL WAS LOCATED ABOUT 195 MILES SOUTHEAST OF NANTUCKET MASSACHUSETTS AND ABOUT 435 MILES SOUTH-SOUTHWEST OF HALIFAX NOVA SCOTIA.

BILL IS MOVING TOWARD THE NORTH-NORTHEAST NEAR 25 MPH. A TURN TOWARD THE NORTHEAST AND AN INCREASE IN FORWARD SPEED ARE EXPECTED ON SUNDAY. ON THE FORECAST TRACK THE CORE OF HURRICANE BILL WILL PASS OFFSHORE OF THE COAST OF NEW ENGLAND OVERNIGHT, BE NEAR NEAR NOVA SCOTIA ON SUNDAY AND BE NEAR NEWFOUNDLAND SUNDAY NIGHT.

MAXIMUM SUSTAINED WINDS ARE NEAR 85 MPH WITH HIGHER GUSTS. BILL IS A CATEGORY ONE HURRICANE ON THE SAFFIR-SIMPSON SCALE. WEAKENING IS EXPECTED TO BEGIN ON SUNDAY AS BILL MOVES OVER COOLER WATERS.

HURRICANE FORCE WINDS EXTEND OUTWARD UP TO 85 MILES FROM THE CENTER AND

Hurricane BILL QuickLook, POSTED 00:00 AST 08/23/2009

TROPICAL STORM FORCE WINDS EXTEND OUTWARD UP TO 275 MILES. NOAA BUOY 44008 LOCATED ABOUT 60 MILES SOUTHEAST OF NANTUCKET RECENTLY REPORTED A SUSTAINED WIND OF 29 MPH AND A WIND GUST OF 40 MPH.

THE ESTIMATED MINIMUM CENTRAL PRESSURE IS 961 MB.

TOTAL RAIN ACCUMULATIONS OF 1 TO 2 INCHES ARE EXPECTED OVER NANTUCKET ISLAND WITH AROUND 1 INCH EXPECTED OVER OUTER CAPE COD AND MARTHAS VINEYARD.

LARGE SWELLS GENERATED BY HURRICANE BILL WILL CONTINUE TO AFFECT MUCH OF THE U.S. EAST COAST. THESE SWELLS WILL LIKELY CAUSE EXTREMELY DANGEROUS SURF AND LIFE-THREATENING RIP CURRENTS.

FORECASTER BRENNAN

For the purpose of timely release, data contained within this QuickLook have undergone a "limited" NOS Quality Assurance/Control; however, the data have not yet undergone final verification. All data subject to NOS verification.

Jump to: Nantucket Island - Water Level, Nantucket Island - Winds, Nantucket Island - Barometric, Nantucket Island - Air/Water Temp, Woods Hole - Water Level, Woods Hole - Barometric, Woods Hole - Air/Water Temp, Fall River - Water Level, Fall River - Barometric, Providence - Water Level, Providence - Winds, Providence - Barometric, Providence - Air/Water Temp, Newport - Water Level, Newport - Winds, Newport - Barometric, Newport - Air/Water Temp, New London - Water Level, New London - Barometric, Boston - Water Level, Fort Point - Water Level, Wells - Water Level, Wells - Water Level, Wells - Barometric, Wells - Air/Water Temp,

Nantucket Island, MA - Return to List

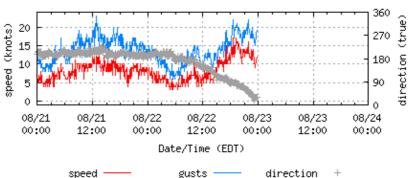
NOAA/NOS/CO-OPS Preliminary 6 min. Water Level vs. Predicted Plot 8449130 Nantucket Island, MA Height (Feet relative to MLLW) from 08/20/2009 23:54 - 08/23/2009 23:54 12.0 10.0 8.0 6.0 4.0 0.0 -2.008/21 08/21 08/22 08/22 08/23 08/23 08/24 00:00 12:00 00:00 00:00 12:00 00:00 12:00 Date/Time (EDT) Predicted WL (Obs-Pred) Observed WL MHHW

Last Observed Sample: 08/22/2009 23:42 (EDT)

Relative to MLLW: Observed: 2.70 ft. Predicted: 1.98 ft. Residual: 0.72 ft. Historical Maximum Water Level: 10/30/1991, 4.29 ft. above MHHW

Nantucket Island, MA - Return to List

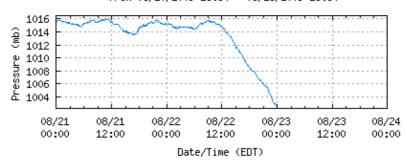
NOAA/NOS/CO-OPS Wind Speed/Gusts/Dir 8449130 Nantucket Island, MA from 08/20/2009 23:54 - 08/23/2009 23:54



Last Observed Sample: 08/22/2009 23:42 (EDT)
Wind Speed: 12 knots Gusts: 19 knots Direction: 029° T

Nantucket Island, MA - Return to List

NOAA/NOS/CO-OPS Barometric Pressure Plot 8449130 Nantucket Island, MA from 08/20/2009 23:54 - 08/23/2009 23:54



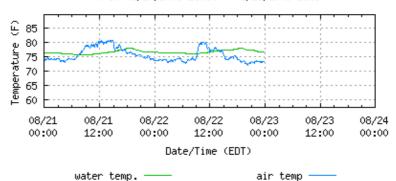
barometric pressure ——

Last Observed Sample: 08/22/2009 23:42 (EDT)

Barometric Pressure: 1002.7 mb

Nantucket Island, MA - Return to List

NOAA/NOS/CO-OPS Air/Water Temperature Plot 8449130 Nantucket Island, MA from 08/20/2009 23:54 - 08/23/2009 23:54



Last Observed Sample: 08/22/2009 23:42 (EDT)

Water Temperature: 76.8° F Air Temperature: 73.2° F

Woods Hole, MA - Return to List

NOAA/NOS/CO-OPS Preliminary 6 min. Water Level vs. Predicted Plot 8447930 Woods Hole, MA Height (Feet relative to MLLW) from 08/20/2009 23:54 - 08/23/2009 23:54 12.0 10.0 8.0 6.0 4.0 0.0 -2.0 08/21 08/21 08/22 08/22 08/23 08/23 08/24 00:00 12:00 00:00 00:00 12:00 00:00 12:00 Date/Time (EDT) Predicted WL (Obs-Pred) Observed WL MHHW

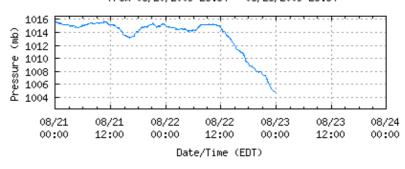
Last Observed Sample: 08/22/2009 23:42 (EDT)

Relative to MLLW: Observed: 2.66 ft. Predicted: 2.06 ft. Residual: 0.60 ft.

Historical Maximum Water Level: 09/21/1938, 8.58 ft. above MHHW

Woods Hole, MA - Return to List

NOAA/NOS/CO-OPS Barometric Pressure Plot 8447930 Woods Hole, MA from 08/20/2009 23:54 - 08/23/2009 23:54



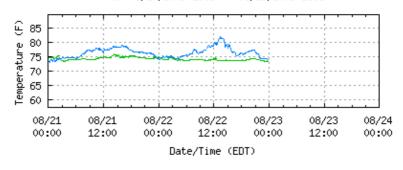
Last Observed Sample: 08/22/2009 23:42 (EDT)

Barometric Pressure: 1004.8 mb

barometric pressure -

Woods Hole, MA - Return to List

NOAA/NOS/CO-OPS Air/Water Temperature Plot 8447930 Woods Hole, MA from 08/20/2009 23:54 - 08/23/2009 23:54



water temp. — air temp — Last Observed Sample: 08/22/2009 23:42 (EDT)

Water Temperature: 73.4° F Air Temperature: 74.1° F

Fall River, MA - Return to List

NOAA/NOS/CO-OPS Preliminary 6 min. Water Level vs. Predicted Plot 8447386 Fall River, MA Height (Feet relative to MLLW) from 08/21/2009 00:00 - 08/24/2009 00:00 12.0 10.0 8.0 6.0 4.0 2.0 -2.0 08/21 08/21 08/22 08/22 08/23 08/23 08/24 00:00 12:00 12:00 00:00 00:00 12:00 00:00 Date/Time (EDT)

Last Observed Sample: 08/22/2009 23:42 (EDT)

(Obs-Pred)

MHHW

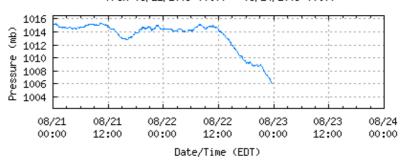
Predicted WL

Observed WL

Relative to MLLW: Observed: 5.06 ft. Predicted: 4.74 ft. Residual: 0.32 ft. Historical Maximum Water Level: 12/12/2000, 2.76 ft. above MHHW

Fall River, MA - Return to List

NOAA/NOS/CO-OPS Barometric Pressure Plot 8447386 Fall River, MA from 08/21/2009 00:00 - 08/24/2009 00:00



barometric pressure ——

Last Observed Sample: 08/22/2009 23:42 (EDT)

Barometric Pressure: 1006.1 mb

Providence, RI - Return to List

NOAA/NOS/CO-OPS Preliminary 6 min. Water Level vs. Predicted Plot 8454000 Providence, RI Height (Feet relative to MLLW) from 08/21/2009 00:00 - 08/24/2009 00:00 12.0 10.0 8.0 6.0 4.0 2.0 -2.0 08/21 08/21 08/22 08/22 08/23 08/23 08/24 00:00 12:00 12:00 00:00 00:00 12:00 00:00 Date/Time (EDT) Predicted WL (Obs-Pred)

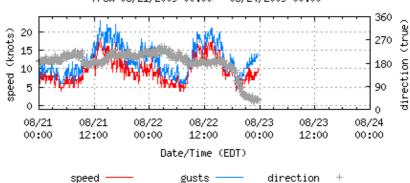
Observed WL —— MHHW —— Last Observed Sample: 08/22/2009 23:42 (EDT)

Relative to MLLW: Observed: 5.10 ft. Predicted: 4.88 ft. Residual: 0.22 ft.

Historical Maximum Water Level: 09/21/1938, 12.67 ft. above MHHW

Providence, RI - Return to List

NOAA/NOS/CO-OPS Wind Speed/Gusts/Dir 8454000 Providence, RI from 08/21/2009 00:00 - 08/24/2009 00:00

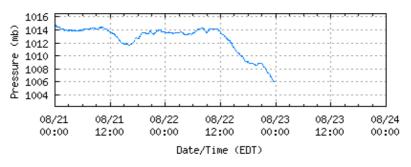


Last Observed Sample: 08/22/2009 23:42 (EDT)

Wind Speed: 10 knots Gusts: 14 knots Direction: 042° T

Providence, RI - Return to List

NOAA/NOS/CO-OPS Barometric Pressure Plot 8454000 Providence, RI from 08/21/2009 00:00 - 08/24/2009 00:00



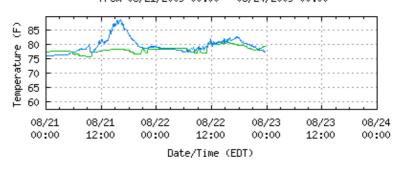
barometric pressure ----

Last Observed Sample: 08/22/2009 23:42 (EDT)

Barometric Pressure: 1006.0 mb

Providence, RI - Return to List

NOAA/NOS/CO-OPS Air/Water Temperature Plot 8454000 Providence, RI from 08/21/2009 00:00 - 08/24/2009 00:00



water temp. — air temp — Last Observed Sample: 08/22/2009 23:42 (EDT)

Water Temperature: 79.2° F Air Temperature: 77.4° F

Newport, RI - Return to List

NOAA/NOS/CO-OPS Preliminary 6 min. Water Level vs. Predicted Plot 8452660 Newport, RI Height (Feet relative to MLLW) from 08/20/2009 23:54 - 08/23/2009 23:54 12.0 10.0 8.0 6.0 4.0 -2.0 08/21 08/21 08/22 08/22 08/23 08/23 08/24 12:00 00:00 12:00 00:00 00:00 12:00 00:00 Date/Time (EDT) Predicted WL (Obs-Pred)

Last Observed Sample: 08/22/2009 23:42 (EDT)

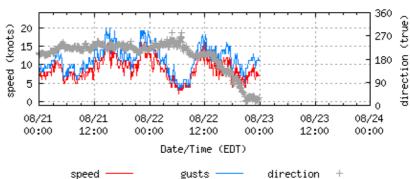
MHHW

Observed WL

Relative to MLLW: Observed: 3.89 ft. Predicted: 3.30 ft. Residual: 0.59 ft. Historical Maximum Water Level: 09/21/1938, 9.46 ft. above MHHW

Newport, RI - Return to List

NOAA/NOS/CO-OPS Wind Speed/Gusts/Dir 8452660 Newport, RI from 08/20/2009 23:54 - 08/23/2009 23:54

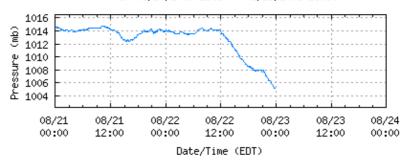


Last Observed Sample: 08/22/2009 23:42 (EDT)

Wind Speed: 7 knots Gusts: 11 knots Direction: 031° T

Newport, RI - Return to List

NOAA/NOS/CO-OPS Barometric Pressure Plot 8452660 Newport, RI from 08/20/2009 23:54 - 08/23/2009 23:54



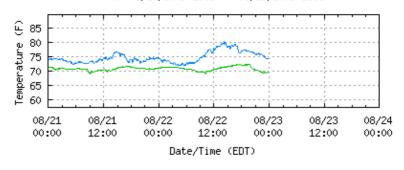
barometric pressure ---

Last Observed Sample: 08/22/2009 23:42 (EDT)

Barometric Pressure: 1005.2 mb

Newport, RI - Return to List

NOAA/NOS/CO-OPS Air/Water Temperature Plot 8452660 Newport, RI from 08/20/2009 23:54 - 08/23/2009 23:54

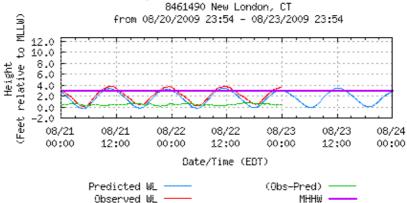


water temp. — air temp — Last Observed Sample: 08/22/2009 23:42 (EDT)

Water Temperature: 69.6° F Air Temperature: 74.5° F

New London, CT - Return to List

NOAA/NOS/CO-OPS
Preliminary 6 min. Water Level vs. Predicted Plot
8461490 New London, CT
from 08/20/2009 23:54 - 08/23/2009 23:54



Last Observed Sample: 08/22/2009 23:42 (EDT)

Relative to MLLW: Observed: 3.63 ft. Predicted: 3.10 ft. Residual: 0.53 ft.

Historical Maximum Water Level: 09/21/1938, 7.53 ft. above MHHW

New London, CT - Return to List

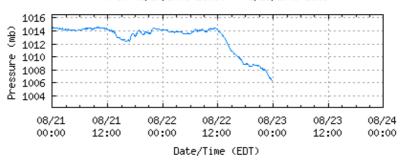
NOAA/NOS/CO-OPS Wind Speed/Gusts/Dir 8461490 New London, CT from 08/20/2009 23:54 - 08/23/2009 23:54 360 speed (knots) 20 270 15 direction 180 10 5 90 0 08/21 08/21 08/22 08/22 08/23 08/23 08/24 00:00 12:00 00:00 12:00 00:00 12:00 00:00 Date/Time (EDT) direction speed gusts -

Last Observed Sample: 08/22/2009 23:42 (EDT)

Wind Speed: 6 knots Gusts: 10 knots Direction: 360° T

New London, CT - Return to List

NOAA/NOS/CO-OPS Barometric Pressure Plot 8461490 New London, CT from 08/20/2009 23:54 - 08/23/2009 23:54

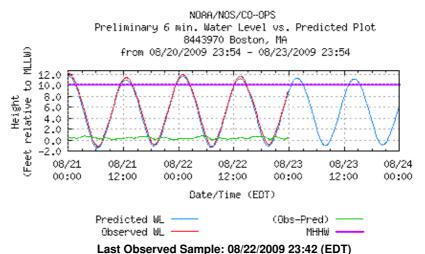


barometric pressure ——

Last Observed Sample: 08/22/2009 23:42 (EDT)

Barometric Pressure: 1006.4 mb

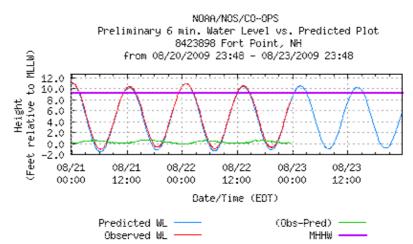
Boston, MA - Return to List



Relative to MLLW: Observed: 8.78 ft. Predicted: 8.38 ft. Residual: 0.40 ft.

Historical Maximum Water Level: 02/07/1978, 4.82 ft. above MHHW

Fort Point, NH - Return to List

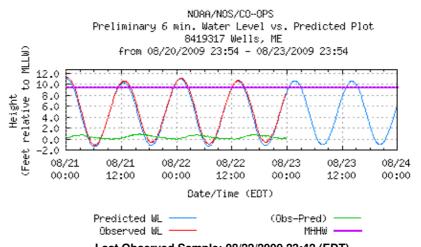


Last Observed Sample: 08/22/2009 23:30 (EDT)

Relative to MLLW: Observed: 7.69 ft. Predicted: 7.61 ft. Residual: 0.08 ft.

Historical Maximum Water Level: n/a

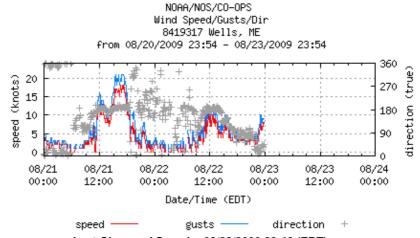
Wells, ME - Return to List



Last Observed Sample: 08/22/2009 23:42 (EDT)

Relative to MLLW: Observed: 8.30 ft. Predicted: 8.12 ft. Residual: 0.18 ft. Historical Maximum Water Level: 01/31/2006, 2.74 ft. above MHHW

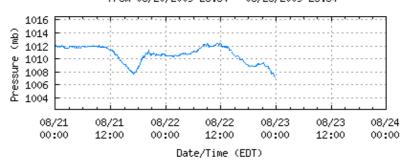
Wells, ME - Return to List



Last Observed Sample: 08/22/2009 23:42 (EDT)
Wind Speed: 8 knots Gusts: 9 knots Direction: 046° T

Wells, ME - Return to List

NOAA/NOS/CO-OPS Barometric Pressure Plot 8419317 Wells, ME from 08/20/2009 23:54 - 08/23/2009 23:54



barometric pressure —

Last Observed Sample: 08/22/2009 23:42 (EDT)

Barometric Pressure: 1007.2 mb

Wells, ME - Return to List

NOAA/NOS/CO-OPS Air/Water Temperature Plot 8419317 Wells, ME from 08/20/2009 23:54 - 08/23/2009 23:54



Last Observed Sample: 08/22/2009 23:42 (EDT)

Water Temperature: 61.9° F Air Temperature: 71.6° F

Hurricane BILL QuickLook, POSTED 00:00 AST 08/23/2009

Center for Operational Oceanographic Products & Services (CO-OPS) | National Ocean Service (NOS) National Oceanic and Atmospheric Administration | U.S. Department of Commerce